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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,342	09/28/2004	Klaus Voigtlaender	3089	5383

7590 05/17/2006  
Striker, Striker & Stenby  
103 East Neck Road  
Huntington, NY 11743

EXAMINER

PHAM, LAM P

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/509,342

Applicant(s)

VOIGTLAENDER, KLAUS

Examiner

Lam P. Pham

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 7, 9-11 rejected under 35 U.S.C. 102(b) as being anticipated by Hughes et al. (US 5081406).

Regards claim 1, Hughes disclose a contact protection device, characterized in that a sensor (16) is provided for generating and detecting an electromagnetic field situated in the vicinity of a moving part (saw blade 18) that should not be touched, that an evaluation unit (signal processor 24, level detector 28) connected to the sensor is provided in order to evaluate sensor signals that can be generated by the sensor, wherein the evaluation unit can generate an evaluation signal (30), and that a control unit (brake and motor control 32) connected to the evaluation unit is provided, which is designed and used so as to control the movement of the part as a function of the evaluation signal as seen in Figures 1-6; col. 3, lines 4-35; col. 4, lines 42 to col. 6, lines 20; col. 7, line 59 to col. 8, lines 40.

Regards claim 2, Hughes disclose the moving part is the saw blade (18) of a circular saw as seen in Figure 1.

Regards claim 7, Hughes disclose an oscillatory circuit (10) connected to the antenna is provided and that the evaluation unit is designed so that it can evaluate the

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detuning of the oscillatory circuit.

Regards claim 9, Hughes disclose a method for protection against contact with a moving part, characterized by means of the following steps:

a high-frequency electromagnetic signal is generated by an oscillatory circuit (10) and

an antenna (16),

an evaluation unit (24, 28) detects and monitors a characteristic of the electromagnetic signal, and

based on the characteristic, a determination is made as to whether influence should be exerted on the movement of the moving part (18).

Regards claim 10, Hughes disclose the detuning of the oscillatory circuit serves as the characteristic as seen in col. 6, lines 14-20.

Regards claim 11, Hughes disclose the resonance frequency of the oscillatory circuit serve as the characteristic as seen in col. 6, lines 14-20.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6, 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes et al.

Regards claim 3, Hughes fail to disclose another sensor is provided, the two sensors are positioned on the two sides of the saw blade.

However, it has been known in the art of protection device for saw blade to provide sensors at different locations in closed proximity of the blade in order to protect an operator' s hand from being cut by the saw blade as found in Sako (US 6959631).

In view of the known art, it would have been obvious to one of ordinary skilled in the art to provide a second sensor and position the sensors on the two sides of the blade for increasing protection area around the blade.

Regards claim 4, Hughes fail to disclose three additional sensors are provided and two sensors are positioned on each side of the saw blade.

However, it has been known in the art of protection device for saw blade to provide sensors at different locations in closed proximity of the blade in order to protect an operator' s hand from being cut by the saw blade as found in Sako (US 6959631).

In view of the known arts, it would have been obvious to one of ordinary skilled in the art to provide three additional sensors and position two sensors on each side of the blade for increasing protection area around the blade.

Regards claim 5, Hughes fail to disclose the sensor has a flat antenna for generating electromagnetic waves, instead a slip ring or parallel plate capacitance coupling as seen in col. 3, lines 9-13.

It would have been obvious to one of ordinary skilled in the art to realize that parallel plate coupling is a flat antenna.

Regards claim 6, Hughes fail to disclose the sensor is positioned on the underside of a jam guard for the saw blade.

It has been known in the art of protection device for saw blade to provide sensors at different locations in closed proximity of the blade under the jam guard or above the table in order to protect an operator's hand from being cut by the saw blade as found in Sako (US 6959631) as seen in Figure 1; col. 7, lines 1-16.

In view of the known arts, it would have been obvious to one of ordinary skilled in the art to position the sensor on the underside of a jam guard for the saw blade for protecting around the blade.

Regards claim 8, Hughes fail to disclose the waves that can be emitted by the antenna in the range of the ISM band.

Since Hughes teach of using low frequency (MHz) for generating and detecting waves in close proximity of the saw blade and effectively protect operator's hand from being cut by the blade, it would have been obvious to one of ordinary skilled in the art to recognize that the waves being emitted by the antenna in the range of the ISM band is just a matter of design choice while provide the same protection.

***Allowable Subject Matter***

5. Claim 12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kuan (US 6853300) disclose a saw cover safety sensing device.

Sako (US 6959631) disclose a power tools using radar sensors for protection.

Gass et al. (US 6997090) disclose a safety systems for power equipment.


Teodorescu (US 5986549) discloses a position and movement resonant sensor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lam P. Pham whose telephone number is 571-272-2977. The examiner can normally be reached on 10AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lam Pham

  
THOMAS MULLEN  
PRIMARY EXAMINER  
AU 2612 5-15-06